RECENT LITERATURE.

Ridgway's 'Birds of North and Middle America.' Part I. 1 - Doubtless no recent work on American birds will receive a more cordial welcome than this 'Part I' of Mr. Ridgway's long projected treatise on the 'Birds of North and Middle America.' Some idea of the amount of labor involved in treating the 3000 species embraced in this wide area can be obtained by an examination of the present volume—the first of a contemplated series of eight - which includes only the single family Fringillidæ, numbering 389 species and subspecies. As stated in the author's preface: "Although preparations for the present work have been more or less actively conducted for some twenty years past, as time and opportunity permitted, the actual work of putting together the vast amount of material accumulated during that period was not begun until September, 1894, when the author was directed by Dr. G. Brown Goode, Assistant Secretary of the Smithsonian Institution, in charge of the National Museum, to consider of paramount importance among his official duties the task of 'making available, through publication, the results of the ornithological work of the Government, as represented in the collections of the Smithsonian Institution.' The labor of collating references pertaining to more than 3000 species of birds, verifying citations of original descriptions, measuring many thousands of specimens, and other time-consuming details connected with the preparation of such a work has necessarily delayed the beginning of its publication; but most of this drudgery having been disposed of, it is hoped that future progress may be more rapid."

As to the scope of the work, the author says: "In the following pages the attempt is made to describe every species and subspecies, or definable form, of bird found on the continent of North America, from the arctic districts to the eastern end of the Isthmus of Panama, together with those of the West Indies and other islands of the Caribbean Sea (except Trinidad and Tobago), and the Galapagos Archipelago; introduced and naturalized species being included, as well as accidental or casual visitors."

"The classification presented," it is stated, "is essentially that of the most recent and advanced authorities, with such minor modifications as

¹ The Birds | of | North and Middle America: | A Descriptive Catalogue | of the | Higher Groups, Genera, Species and Subspecies of Birds | known to occur in North America, from the | Arctic Lands to the Isthmus of Panama, | the West Indies and other Islands | of the Caribbean Sea, and the | Galapagos Archipelago. | By | Robert Ridgway, | Curator, Division of Birds. | — | Part I. | Family Fringillidæ—the Finches. | — | Washington: | Government Printing Office. | 1901 = Bulletin of the United States National Museum. No. 50. —8vo. pp. i−xxxii, + 1l. = errata, + pp. 1−715, pll. i−xx.

in the judgment of the present author seem desirable." Considerable space is given to a statement of the principles which have been adopted as the author's guide in matters of classification, as regards not only the higher groups but also in respect to species and subspecies, which seem in the main both commendable and sound. As regards nomenclatural rules, those of the American Ornithologists' Union "have been strictly adhered to in all respects," but he does not feel bound to adhere to the decisions of its Committee in respect to the status of species and subspecies, or other groups, when his investigations lead to other results, which is of course proper and natural, although, as he admits, such questions are often merely a matter of opinion, and depend upon, among other things, "one's ability to discern differences and estimate the degree of their constancy." That Mr. Ridgway is, par excellence, an expert in such matters, no one will question; vet it is possible for even experts to differ as to "the degree of difference which should be recognized in nomenclature."

In respect to the citation of references in making up the synonymies, Mr. Ridgway has taken the trouble to be scrupulously exact, for which he cannot be too highly commended. Apropos of this he says: "The correction of an author's orthographical errors is a pernicious practice, though much in vogue; 'science is not literature,' neither has it any concern with what an author should have done or meant to do, but only with what he actually did."

The material on which Mr. Ridgway's work is based is of course primarily that of the U. S. National Museum, but this has been supplemented by that of all the other principal museums in the United States, so far as it seemed necessary to the work in hand.

Respecting his beginning his work with the Finches, the author says: "The necessity for beginning this work with the highest instead of the lowest forms is to be regretted, and may be explained by briefly stating that owing to inadequate facilities for properly arranging the larger birds in the National Museum collections these are not available for study, and consequently it became necessary either to begin with the smaller birds, already systematically arranged, or else postpone the work indefinitely." This unfortunate condition of the National Museum collection has not only been a hindrance for many years to the curator in his own official work, but a great detriment to other specialists having need to consult this part of the collection, and hence to the progress of science. It is a condition, however, for which neither the curator nor any officers of the Museum are responsible, but is due to a short-sighted and niggardly Congress that for so long a time has turned a deaf ear to the need of a building suitable to properly house and render accessible the scientific material belonging to the National Government.

The author's definition of the term ornithology (p. 1) is followed by an unfortunate classification of the different kinds of ornithology. He says: "There are two essentially different kinds of ornithology: systema-

tic or scientific, and popular. The former deals with the structure and classification of birds, their synonymies and technical descriptions. The latter treats of their habits, songs, nesting, and other facts pertaining to their life-histories. Popular ornithology is the more entertaining, with its savor of wildwood, green fields, the riverside and seashore, bird songs, and the many fascinating things connected with out-of-door Nature. But systematic ornithology, being a component part of biology—the science of life—is the more instructive and therefore more important." In this hasty generalization an important field of research has not only been disregarded but, by inference at least, ruled out as not only not scientific, but as not falling within the author's definition of biology. This is, in a broad sense, the life-histories, including the relation of the animal to its environment, and the many problems of evolution that depend for their solution upon the study of the living creature.

Mr. Ridgway considers at some length the general subject of the classification of birds, giving diagnoses of the higher groups, with keys to the subclasses, orders, suborders, and families, so far as they come within the scope of his work. The recent classifications of birds are critically examined and compared, and the synonymy of the higher groups, and copious references to authorities, are given in footnotes. Mr. Ridgway's own classification as adopted for his work may be presented as follows:

Class Aves.

Subclasses. Saururæ (= Archæopteryx). Ornithuræ.

Orders of the ORNITHURE.

Odontolcæ.	Colymbiformes.	Galliformes.
Odontotormæ.	Procellariiformes.	Gruiformes.
Struthioniformes.	Ciconiiformes.	Charadriiformes.
Rheiformes.	Anseriformes.	Cuculiformes.
Casuariiformes.	Falconiiformes.	Coraciiformes.
Apterygiformes.	Crypturiformes.	Passeriformes.
Sphenisciformes.		

Suborders of Passeres.

Desmodactyli. Eleutherodactyli.

Superfamilies of the Eleutherodactyli.

Clamatores (chiefly American), Pseudoscines (confined to Australia). Oscines.

Families of OSCINES.

Catamblyrhynchidæ. ¹	Corvidæ.
Fringillidæ.	Paridæ.
Tanagridæ.	Sittidæ.
Icteridæ.	Certhiidæ.
Cœrebidæ.	Troglodytidæ.
Mniotiltidæ.	Cinclidæ.
Motacillidæ.	Chamæidæ.
Hirundinidæ.	Sylviidæ.
Vireonidæ.	Turdidæ.
Ampelidæ.	Mimidæ.
Ptiliogonatidæ.	Sturnidæ.
Dulidæ.	Ploceidæ.
Laniidæ.	Alaudidæ.

Of the 26 families here given two are represented only by introduced species, namely, the Ploceidæ and Sturnidæ. The position of several groups of doubtful affinities is briefly considered, and reasons given for their present allocation. On comparison with the A. O. U. Check-List, it will be noted that the Nuthatches and the Wren-tits have been separated from the Titmice, each group forming a distinct family. The Thrashers and their allies are separated from the Wrens, forming a family Mimidæ, to which is referred the much classified genus *Polioptila*, which seems to find a new resting place with each 'revision' of its affinities; and *Phainopepla* is severed from the Ampelidæ and referred to a family Ptiliogonatidæ. With most of these changes we are in hearty sympathy.

Coming now to the family Fringillidæ, the subject of the present volume, it is to be noted that several genera heretofore associated with the Tanagridæ, and admittedly of doubtful affinities, are referred to the Fringillidæ, as the finch-like genera Buarremon, Arremon, Pitylus and Saltator. In fact, the line between the Tanagridæ and Fringillidæ is still confessedly artificial and arbitrary. Also, Mr. Ridgway admits his inability to satisfactorily separate the family into subfamilies, and his criticism of Mr. Sharpe's 'subfamilies' seems quite justified. He, however, considers it expedient to separate the 69 genera treated in the present volume into 18 groups, as follows:

¹ Consists of the single species *Catamblyrhynchus diademata* Lafr., of the northern Andes (Colombia to Peru), usually placed in the Fringillidæ, but raised to family rank by Mr. Ridgway.

Coccothrausteæ.
Loxiæ.
Pyrrhulæ,
Fringillæ.
Calcarieæ.
Calamospizæ.
Spizæ.
Chondesteæ,
Ammodrami.

Zonotrichiæ.
Geospizæ.
Haplospizæ.
Sporophilæ.
Cyanospizæ.
Oryzoboreæ.
Guiracæ.
Cardinaleæ.
Pityleæ.

Mr. Ridgway's treatment is entirely technical, consisting, in addition to the definitions of the higher groups and the 'keys,' of a description of the external characters of each species and subspecies, including measurements (in millimeters), and the differences due to age and sex; to which is added a concise statement of the geographical range, but nothing relating to the nests and eggs or the life histories. This descriptive matter is followed by the synonymies and bibliographical citations, which are often very extended and make up by far the greater part of the text. They have evidently been compiled with the utmost care, and embrace all that seem likely to serve any useful purpose. Type localities are specified when known; and likewise the location of type specimens.

The citations have been given with extreme exactness, in order to show just how the names were employed, even to the precise orthography of the writer; and "when the locality to which a citation refers can be ascertained it has been given," with obvious advantages. "Anyone," says the author, "who has had occasion to verify citations must know that the amount of inaccuracy and misrepresentation in current synonymies, even the most authoritative and elaborate, is simply astounding. They abound with names which do not even exist in the works cited, with those which do not correspond with the originals in orthography, and others which have no meaning or use whatever." Such a standard as is here set should prove a reprimand to those guilty of such loose methods and an incentive to accuracy to future workers. But there is one point we note with some surprise, namely, that the author of a manuscript name is given as the authority for the name instead of the author who first published it. In citation due credit is given by citing such names in the following manner, to take an actual case as an illustration, namely: Leucosticte taphrocotis, var. australis Ridgway (ex Allen MS.) etc., and Ridgway and not Allen should stand as the authority for the name australis; and so in all similar cases. Thus the form in question, now properly recognized as a full species, should stand as Leucosticte australis (Ridgway) - not Leucosticte australis (Allen), as seems to be Mr. Ridgway's rule for this class of cases. This criticism relates of course only to manuscript names on museum labels, or to manuscript names merely, and not to inedited manuscripts published as such by another author.

The number of species treated in the present volume is 221, with 168 additional subspecies, or a total of 389 forms, of which about one half come within the scope of the A. O. U. Check-List, the rest being extralimital. In preparing the present volume the author has had far more material, and given a far greater amount of time to the subject than any of his predecessors, and in justice to him it is but fair to give here his own statement of how the investigation has been conducted: "No doubt many of the forms which the author has recognized as subspecies in the present work may appear trivial to others, especially those who have not had advantage of the material upon which they are based; but in all cases it has been the author's desire to express exactly the facts as they appear to him in the light of the evidence examined, without any regard whatever to preconceived ideas, either of his own or of others, and without consideration of the inconvenience which may result to those who are inclined to resent innovations, forgetful of the fact that knowledge can not be complete until all is known." Yet it is sometimes possible for slight differences to become magnified and their importance over-estimated by long and intense consideration of them — in other words, there is danger of losing one's poise of judgment in dwelling upon minute details, which tend thereby to assume exaggerated importance.

In comparing the present work with the A. O. U. Check-List, so far as they cover the same field, it is to be noticed that in a few instances forms admitted by the A. O. U. Committee have been rejected by Mr. Ridgway, while on the other hand a larger number that have been rejected, or held in abeyance by the Committee, are here recognized. Probably neither can be assumed to be always in the right, and that in some cases the last word has yet to be said.

The volume bears on every page the stamp of patient and conscientious labor and that thoroughness of research which characterizes all its author's work. 'When the 'Birds of North and Middle America' is completed we shall have for the first time a treatise including the whole North American avifauna down to the Isthmus of Panama, together with that of the West Indies and the Galapagos Archipelago, for which students of ornithology the world over cannot be too grateful. It is to be hoped that strength and health will enable the author to complete the herculean task already so well advanced. — J. A. A.

Scott on the Song of Baltimore Orioles in Captivity.\(^1\)— The observations here detailed are of remarkable interest as tending to throw light on the question of how birds acquire their distinctive songs and call notes. It is, indeed, not too much to say that this is one of the most interesting and important series of observations as yet contributed to the subject.

¹ Data on Song in Birds. Observations on the Song of Baltimore Orioles in Captivity. By William E. D. Scott. Science, N. S., Vol. XIV, No. 353, pp. 522-526, Oct. 4, 1901.